

ABSTRACT

An optical fiber pumped through the cladding and a method of fabricating it

The invention concerns an optical fiber pumped through the cladding, including:

- a core having an optical index n_1 ,
- around the core, a first cladding having an index n_2 lower than n_1 , and
- around the first cladding, a second cladding having an index n_3 lower than n_2 ,

characterized in that the interface between the first cladding and the second cladding has a substantially polygonal cross section.

The invention also concerns a method of fabricating an optical fiber pumped through the cladding, characterized in that it consists in executing the following steps:

- placing around a central optical preform including a core having an index n_1 surrounded by a first cladding having an index n_2 lower than n_1 , a plurality of rods having an index n_3 lower than n_2 , and
- drawing the optical preform and the rods in a vacuum to obtain an optical fiber including a core and two claddings.

Figure to be published : Fig. 1